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REPUBLIC OF SOUTH AFRICA

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The attached documents are true copies of the form P2, P6 and provisional specification of South African patent application No 98/9041

In the name of : **DOLPHIN SENSOR-TECH CC**

Filed on the : **05TH October 1998**

Entitled : **COMMUNICATION SYSTEM**

PRIORITY DOCUMENT
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day of

[Signature]
Registrateur van Patente
Registrar of Patents

REPUBLIC OF SOUTH AFRICA				REGISTER OF PATENTS				PATENTS ACT, 1978			
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FORM P6

REPUBLIC OF SOUTH AFRICA
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PROVISIONAL SPECIFICATION

(Section 30(1) - Regulation 27)

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71	Full name(s) of applicant(s) DOLPHIN SENSO-TECH CC, a legal body organised and existing under the laws of the Republic of South Africa					
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54	Title of Invention COMMUNICATION SYSTEM					

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COMMUNICATION SYSTEM

FIELD OF THE INVENTION

This invention relates to a communication system and more particularly to a visual and audio communication system.

BACKGROUND TO THE INVENTION

It is often necessary to inspect a remote site such as a building site, a factory, any other dwelling site or the like.

Where such a site is located at a remote location, on site inspections can be very time consuming and expensive.

OBJECT OF THE INVENTION

It is the object of this invention to provide a communication system which, at least partially, alleviates some of the abovementioned difficulties.

/SUMMARY OF

SUMMARY OF THE INVENTION

In accordance with this invention there is provided a communication system comprising a portable camera connectable to a portable operating means, the operating means having a processor for processing an image received from the camera, a transmitter for transmitting the processed image to a base station, and a receiver for receiving an instruction signal from the base station.

Further features of the invention provide for the camera to be a video camera; for the processed signal to be transmitted over a LAN, WAN, PSDN, ISDN, Satellite, Microwave System, Radio Frequency System, Cellular Telephone Network, the Internet or an intranet.

A further feature of the invention provides for the camera to be operable at a remote location.

There is also provided for at least a one way, preferably a two way, voice channel to be provided between the base station and the remote location.

A still further feature of the invention provides for the remote location to be a building site or a factory or a shopping complex.

Further features of the invention provide for a transceiver, a monitor and a hand set to be located at the base station; for the transceiver to receive processed images transmitted from the operating means; for the transceiver to re-process received images; for re-processed images to be displayed on the monitor; and for the instruction signal to be transmitted from the hand set through the communication system to a head set connected to the operating means.

This invention extends to a communication method comprising the steps of:
communicating a portable camera with a portable operating means,
operating the camera at a remote location,
transmitting images viewed by the camera to the operating means,

/processing the

processing the images with a processor in the operating means, transmitting processed images to a base station, and receiving instructions from the base station to allow for the directing of the camera to receive desired images at the base station.

BRIEF DESCRIPTION OF THE DRAWINGS

One embodiment of the invention is described below by way of example only and with reference to the accompanying drawing, which shows a schematic representation of a communication system.

DETAILED DESCRIPTION WITH REFERENCE TO THE DRAWINGS

With reference to the drawing a communication system is generally indicated by reference numeral (1).

The communication system consists of a portable camera (2) which is connected to a portable operating means (3). A remote headset (7) is also connected to the operating means (3).

The operating means (3) consists of a processor (not shown), and a transceiver (not shown).

The camera (2), operating means (3) and on site head set (7) are located and operated at a remote location (8). The remote location (8) can be a building site, factory, shopping complex or the like.

A base station (4) is located in an office dwelling or the like. The base station consists of a transceiver (5), a monitor (9) and a base station hand set (6). The monitor (9) can conveniently be a television set or a computer screen or even a closed circuit television monitor.

In use, an operator operates the camera (2) at the remote location (8). The operating means (3) receives images from the camera (2) at its processor. The images are processed by the processor and transmitted to the base station. The transceiver (5) receives the processed images at the base station (4). The processed images are again processed and displayed on the monitor (9).

A person at the base station (4) can control what is displayed on the monitor (9) by giving instructions to the operator of the camera. A two-way radio link is established between the base station (4) and the remote location (8). The remote head set (6) at the remote location (8), worn by the camera operator, and the hand set (7) used at the base station (4), is used to convey messages between the base station and the remote location (8).

It is envisaged that this communication system is convenient to use where a person at a base station (4) needs to inspect a remote location. The communication system may prevent unnecessary trips of an inspector or a person from the base station to the remote location. A person at the base station can control what is seen on the monitor (9) by communicating with the camera operator over a radio link. It will be appreciated that this radio link need not be a two-way radio link. A one way link may be sufficient to instruct the operator. A problem or work in progress at the remote location can thus be inspected in this way. Problems or work in progress can be discussed between a person or persons at the base station and a person or persons at the remote location.

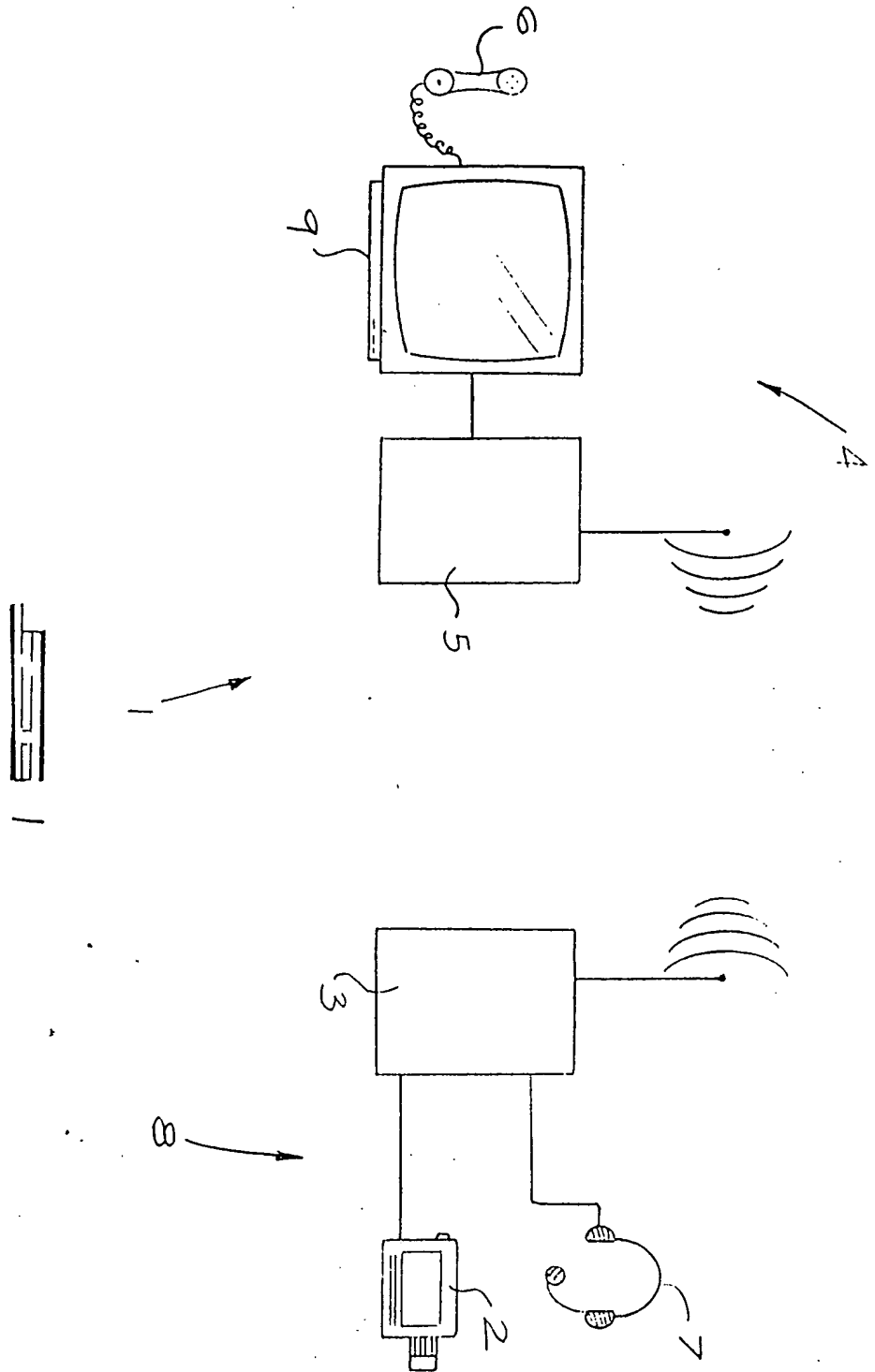
The invention is not limited to the precise details as described herein. For example, instead of using a dedicated two way radio link other voice communication means such as a cellular telephone, satellite telephone or the like can be used. Also, the camera need not be a video camera but can be, for example, a digital camera. The camera can also communicate with wireless link with operating means. Also, the camera may be controlled from the base station without having to employ a cameraman.

Transmission of the processed camera images can be via a LAN, WAN, PSDN, ISDN, Satellite, Microwave System, Radio Frequency System, Cellular Telephone, Network, the Internet or an intranet.

DATED THIS 5th DAY OF OCTOBER 1998



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